SEQUENCE LISTING

<110>	Susan	М.	Freier

<120> ANTISENSE MODULATION OF INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 5 EXPRESSION

<130> RTS-0253

<160> 43

<210> 1 <211> 20

<211> 20 <212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 1

teegteateg eteeteaggg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 2

atgcattctg cccccaagga

20

<210> 3

<211> 1612

ś	ď		
	1		
	*		i
ş			
	4		
- 244	į		-
	20		
i	-		
	į	Ļ	
į	2		
į	v		
ì	*		
	7		
į	į		
	1		

<212	2> DI	NΑ														
<21	3 > H	amo :	sapi	ene												
-22.		,,,,,	oup I													
<220	j>															
<220)>															
<22	L> CI	OS														
<222	2> (4	14).	(8	62)												
<400) ~ 3															
CLCI	LCCL	gee i	ccac	cccga	ag gi	caaag	gggg:	g cg	acta	agag	aag			_		55
													Val	Leu	Leu	
												1				
acc	gcg	gtc	ctc	ctg	ctg	ctg	gcc	gcc	tat	gcg	ggg	ccg	gcc	cag	agc	103
Thr	Ala	Val	Leu	Leu	Leu	Leu	Ala	Ala	Tyr	Ala	Gly	Pro	Ala	Gln	Ser	
5					10					15					20	
ata	aaa	taa	++0	gtg	000	taa	a2a	000	taa	~~~	~~~		~~~			151
																131
ьeu	GIY	ser	Pne	Val	His	Cys	GIU	Pro		Asp	Glu	Lys	Ala		Ser	
				25					30					35		
atg	tgc	CCC	CCC	agc	CCC	ctg	ggc	tgc	gag	ctg	gtc	aag	gag	ccg	ggc	199
Met	Cys	Pro	Pro	Ser	Pro	Leu	Gly	Cys	Glu	Leu	Val	Lys	Glu	Pro	Gly	
			40					45					50			
tac	aac	tac	tac	atg	acc	tac	acc	cta	acc	nan	aaa	cac	tea	tac	aac	247
				Met												247
Cys	GTĀ	_	cys	riec	TILL	Cys		Leu	ALd	GIU	GLY		ser	Cys	GIY	
		55					60					65				
gtc	tac	acc	gag	cgc	tgc	gcc	cag	ggg	ctg	cgc	tgc	ctc	ccc	cgg	cag	295
Val	Tyr	Thr	Glu	Arg	Cys	Ala	Gln	Gly	Leu	Arg	Cys	Leu	Pro	Arg	Gln	
	70					75					80					
αac	αaα	gag	aac	ccg	cta	cac	acc	cta	cta	cac	aac	cac	aaa	at t	tac	343
				Pro								-		-	-	343
	Giu	GIU	шуъ	PIO		піѕ	мла	Leu	Leu		GIĀ	Arg	GTĀ	vaı	-	
85					90					95					100	
ctc	aac	gaa	aag	agc	tac	cgc	gag	caa	gtc	aag	atc	gag	aga	gac	tcc	391
Leu	Asn	Glu	Lys	Ser	Tyr	Arg	Glu	Gln	Val	Lys	Ile	Glu	Arg	Asp	Ser	
				105					110					115		
cgt	gag	cac	gag	gag	ccc	acc	acc	tct	gaq	atq	qcc	gag	gag	acc	tac	439

Arg Glu His Glu Glu Pro Thr Thr Ser Glu Met Ala Glu Glu Thr Tyr

			120					125					130			
	ccc Pro	_														487
-	gaa Glu 150															535
	gtc Val															583
	gag Glu															631
	gct Ala		_	_				-	_		_	_			-	679
	gtg Val															727
_	tgc Cys 230															775
	aag Lys															823
	cag Gln	-				_	-	_		-		tga	tgc	gtee	ccc	872
ccc	aacc	ttt «	ccct	cacco	ec et	tccc	ccc	c cag	geec	cgac	tcc	agcc	agc (geet	ecctec	932
acc	ccag	gac s	gcca	ctca	tt to	catc	cati	t taa	aggga	aaaa	atai	ata:	et a	atcta	atttga	992

ggaaactgag gacctcggaa tctctagcaa gggctcaact tcgaaaatgg caacaacaga 1052

gatgaaaaa gctaaaaaga caccccccc etttaaatgg ttttetttt gaggcaagtt 1112
ggatgaacag agaagggaag agaggaagaa cgagaggaag agaagggaag gaagtgtttg 1172
tgtagaaaga agaagaagac gaatagagtt aggaaaagga agacaagcag gtgggcagga 1232
aggacatgca ccgagaccag gcaggggcce aactttcacg tccagccctg gcctggggtc 1292
gggagaggtg ggcgctagaa gatgcagcce aggatgtgc aatcaatgac actattgggg 1352
tttcccagga tggattggtc agggggagaa aggaaaaggc aaaacactcc aggacctctc 1412
ccggatctgt ctcctcctct agccagcagt atggacagct ggacccctga acttcctct 1472
ctcttacctg ggcagagtgt tgtctctcce caaatttata aaaactaaaa tgcattccat 1532
tcctctgaaa gcaaaacaaa ttcataattg agtgatatta aatagagagg ttttcggaag 1592
cagatctgt aatagaaat

19

<210> 4

<211> 19 <212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 4

ccaaacacac ccgcatctc

<210> 5

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 5

RTS-0253	-5-	PATENT
ttggactggg tcagcttctt tc		22
<210> 6 <211> 26		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> PCR Probe		
<400> 6		
aggetgaage agtgaagaag gacege		26
<210> 7		
<211> 19		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> PCR Primer		
<400> 7		
gaaggtgaag gtcggagtc		19
<210> 8		
<211> 20		
<212> DNA		
<213> Artificial Sequence		
<220>		
<223> PCR Primer		
<400> 8		
gaagatggtg atgggatttc		20
-210- 0		
<210> 9		

77475722 176777

<211> 20

```
<212> DNA
<213> Artificial Sequence
<220>
<223> PCR Probe
<400> 9
                                                                      20
caagetteee gtteteagee
<210> 10
<211> 1722
<212> DNA
<213> Homo sapiens
<220>
<220>
<221> CDS
<222> (752)...(1570)
<400> 10
ggggaaaaga getaggaaag agetgcaaag eagtgtggge ttttteeett tttttgetee
                                                                    60
ttttcattac ccctcctccg ttttcaccct tctccggact tcgcgtagaa cctgcgaatt
                                                                    120
tcgaagagga ggtggcaaag tgggagaaaa gaggtgttag ggtttggggt ttttttgttt
ttgtttttgt tttttaattt cttgatttca acattttctc ccaccctctc ggctgcagcc
                                                                     240
                                                                     300
aacgcctctt acctgttctg cggcgccgcg caccgctggc agctgagggt tagaaagcgg
ggtgtatttt agattttaag caaaaatttt aaagataaat ccatttttct ctcccacccc
                                                                     360
caacgccatc tocactgcat cogatotcat tatttcggtg gttgcttggg ggtgaacaat
                                                                     420
tttgtggctt tttttcccct ataattctga cccgctcagg cttgagggtt tctccggcct
                                                                     480
ccgctcactg cgtgcacctg gcgctgccct gcttccccca acctgttgca aggctttaat
                                                                    540
tettgcaact gggacetget egeaggeace ecagecetee acetetetet acatttttge
                                                                     600
```

aagtgtctgg gggagggcac ctgctctacc tgccagaaat tttaaaacaa aaacaaaaac

660

aaaaaaatct ccgggggccc tcttggcccc tttatccctg cactctcgct ctcctgcccc	720
accccgaggt aaagggggcg actaagagaa g atg gtg ttg ctc acc gcg gtc Met Val Leu Leu Thr Ala Val 1 5	772
ctc ctg ctg ctg gcc gcc tat gcg ggg ccg gcc cag agc ctg ggc tcc Leu Leu Leu Leu Ala Ala Tyr Ala Gly Pro Ala Gln Ser Leu Gly Ser 10 15 20	820
ttc gtg cac tgc gag ccc tgc gac gag aaa gcc ctc tcc atg tgc ccc Phe Val His Cys Glu Pro Cys Asp Glu Lys Ala Leu Ser Met Cys Pro 25 30 35	868
ccc agc ccc ctg ggc tgc gag ctg gtc aag gag ccg ggc tgc ggc tgc 2 Pro Ser Pro Leu Gly Cys Glu Leu Val Lys Glu Pro Gly Cys Gly Cys 2 40 2 55	916
tgc atg acc tgc gcc ctg gcc gag ggg cag tcg tgc ggc gtc tac acc Cys Met Thr Cys Ala Leu Ala Glu Gly Gln Ser Cys Gly Val Tyr Thr $60 \hspace{1cm} 65 \hspace{1cm} 70$	964
gag cgc tgc gcc cag ggg ctg cgc tgc ctc ccc cgg cag gac gag gag Glu Arg Cys Ala Gln Gly Leu Arg Cys Leu Pro Arg Gln Asp Glu Glu 75 80 85	1012
aag ccg ctg cac gcc ctg ctg cac ggc cgc ggg gtt tgc ctc aac gaa Lys Pro Leu His Ala Leu Leu His Gly Arg Gly Val Cys Leu Asn Glu 90 95 100	1060
aag agc tac cgc gag caa gtc aag atc gag aga gac tcc cgt gag cac Lys Ser Tyr Arg Glu Gln Val Lys Ile Glu Arg Asp Ser Arg Glu His 105 110 115	1108
gag gag ccc acc acc tct gag atg gcc gag gag acc tac tcc ccc aag Glu Glu Pro Thr Thr Ser Glu Met Ala Glu Glu Thr Tyr Ser Pro Lys 120 125 130 135	1156
atc ttc cgg ccc aaa cac acc cgc atc tcc gag ctg aag gct gaa gca Ile Phe Arg Pro Lys His Thr Arg Ile Ser Glu Leu Lys Ala Glu Ala 140 145 150	1204
gtg aag aag gac cgc aga aag aag ctg acc cag tcc aag ttt gtc ggg	1252

i ai

RTS-0253 -8- PATENT

Val Lys Lys Asp Arg Arg Lys Lys Leu Thr Gln Ser Lys Phe Val	Gly
155 160 165	
gga gec gag aac act gec cac eec egg ate ate tet gea eet gag	atg 1300
Gly Ala Glu Asn Thr Ala His Pro Arg Ile Ile Ser Ala Pro Glu I	Met
170 175 180	
aga cag gag tot gag cag ggc coc tgc cgc aga cac atg gag gct	tcc 1348
Arg Gln Glu Ser Glu Gln Gly Pro Cys Arg Arg His Met Glu Ala	Ser
185 190 195	
ctg cag gag ctc aaa gcc agc cca cgc atg gtg ccc cgt gct gtg	tac 1396
Leu Gln Glu Leu Lys Ala Ser Pro Arg Met Val Pro Arg Ala Val	Tyr
200 205 210	215
ctg ccc aat tgt gac cgc aaa gga ttc tac aag aga aag cag tgc :	aaa 1444
Leu Pro Asn Cys Asp Arg Lys Gly Phe Tyr Lys Arg Lys Gln Cys 1	
220 225 230	
cet tee egt gge ege aag egt gge ate tge tgg tge gtg gae aag	
Pro Ser Arg Gly Arg Lys Arg Gly Ile Cys Trp Cys Val Asp Lys 1	Tyr
235 240 245	
ggg atg aag ctg cca ggc atg gag tac gtt gac ggg gac ttt cag i	tgc 1540
Gly Met Lys Leu Pro Gly Met Glu Tyr Val Asp Gly Asp Phe Gln (Cys
250 255 260	
cac acc ttc gac agc agc gtt gag tga tgcqtccccc cccaacctt	t 1590
His Thr Phe Asp Ser Ser Asn Val Glu	
265 270	
contracco checcacoc cagodeegae tecagodage gooteectee accoc;	1650
continued of the continued the continued of the continued	aggac 1650
gccactcatt tcatctcatt taagggaaaa atatatatct atctatttga ggaaaa	aaaaa 1710
aaadaaaaaa aa	4000
uuuuuuauau aa	1722

<210> 11

<211> 21000 <212> DNA

<212> DM

<213> Homo sapiens

<220>

<400> 11 ggagggaagg ggagacgaag ttactctcct cattgtgttc accetgetcc gaagaactct 60 gtcttccact ggcccctcca cctcctccc attctcggta gccccagcct gtcccccttg 120 cccctttctt acattccggg gggaggaggg cgctgttcag aggggaggag ggcgctgttc 180 agggagegaa ggggageeee ettgtgteta gaaggeetet eeccaceee acceegtgtg 240 agtttgtact gcaaagetce ttggcatect tgectgagtt gggtgttggg aagetcaaat 300 tgcagctaca aactggctgg cagccaggqg ccggctattt aaaaqcgcct qctctcccgg 360 ageceegtag tetetttgga aaettetgea ggggaaaaga getaggaaag agetgeaaag 420 cagtgtggge tttttecctt ttttgctcct tttcattacc cctcctccgt tttcaccctt ctccggactt cgcgtagaac ctgcgaattt cgaagaggag gtggcaaagt gggagaaaag 540 aggtgttagg gtttggggtt tttttgtttt tgtttttgtt ttttaattte ttgattcaa 600 cattitudes caessides getgeageea aegestetta setgitetge qqeqeeqeqe accgctggca gctgagggtt agaaagcggg gtgtatttta gattttaagc aaaaatttta 720 aagataaate cattttete teecaceeee aacqccatet ceactqcate cgateteatt atttcggtgg ttgcttgggg gtgaacaatt ttgtggcttt ttttccccta taattctgac 840 cogotcaggo tigagggttt ctooggootc coctoactgo gigeaccigg coctoacetg cttcccccaa cctgttgcaa ggctttaatt cttgcaactg ggacctgctc gcaggcaccc 960 cagccctcca cctctctcta catttttgca agtgtctggg ggagggcacc tgctctacct gccagaaatt ttaaaacaaa aacaaaaaca aaaaaatctc cqqqqqccct cttqqcccct 1080 ttatecetge actotegete teetgeeeea eeeegaggta aagggggega etaagagaag 1140 atggtgttgc tcaccgcggt cetectgctg etggccgcct atgcggggc ggcccagagc 1200 etgggeteet tegtgeactg egageeetge gacgagaaag eceteteeat gtgeeeecee 1260

agccccctgg gctgcgagct ggtcaaggag ccgggctgcg gctgctgcat gacctgcgcc 1320 etececegge aggacgagga gaageegetg caegeeetge tgeaeggeeg eggggtttge 1440 ctcaacgaaa agagctaccg cgagcaagtc aagatcggtg agcgcgctca gtgtgccagt 1500 cagttacgcg gcgcacgggc gggggacacg agaccggctg ggcccgcgcg ctttgcgcag 1560 caagtggctt cgagctgggg tgcagctcgg gagtagtcgg ggagggtcct tgcaccccgg 1620 aattggagcc ctggaggatc ctgctacccg ggggaactgt ctagccgagt ctatcccage 1680 tttegetett teteetteet ectaeceaea egttgeeege eeeeteeee taetetgtee 1740 gaatactgat tetgagetet tatteggtea caaggteeaa ateccetggt accetateta cagtetgaaa gagtgtatgt tacattatca acteceteet ceaececeet egegeecege 1860 ataggttttt ttctgaactt ggaaaaaaaa tctcttttgt taaaatatta ttttaattgc 1920 ggcctggaga gagaggcatt acctatcttc tgagctaatt ccacctttgt ccctcttggc 1980 ccctccaccc ccgtgcctcc agacgtttct atccctccac ccctacacac acaccacaaa 2040 caccccacat ccttggtagc taatgccttt cgggtgggag ccctgaagcc cctcccatgt 2100 gcataaccat tgctttttat tgaagatgat tgcctgtggt agatggtaaa acatatttaa ctgcaaaatg acttttattt tatcccagga agggaaaaaa atactttagg agtgcggggg 2220 tgcggggtgg gggtggggaa gagtagaaag gaagggtttg gtattctgtg cctggtgttc 2280 gtttctgaat ctaattcctt ttccccctct ccaattcaga ttttacctag gatgaaaggt 2340 ggacataggg ctgggaggca aaaggggatg tgagattcag agctttcaac ttcctcgcct atgcagattc etggcaccac caccacctcc acccccgccc egcaattcet ccctccgcaa 2460 tecececace eegeceteee caatetetta aaccagatea caagtgggtg tggattaagt 2520 gcatgagggg ccctggaaac gcagaatgca aaattcaggg ggcggagaca gaaaagccac 2580

gcactgggag cctcgcctcc gcttgccccg ccccgggtt gcgccqccc caaattctcq 2640 gcgccaggag tctagggttg aaatgattga cacagctact tgttcaatca gaacagttct 2700 aaagttaaat aaactacata aaagtetggg ttetaaqaeg teaaaetgge tattqattet 2820 ctccaaaagg ggttaaaact tggctaaaca atgtttattt ggcgtagttt agttacggag 2880 acagtttagt tacgggggca ateccettct cectecetgt cecttteegt tactcaegag 2940 caccetaaca tgagttttet gaagtgeaaa ttteagteae tatagtgeag gagaggagtg cgtccgcgct tgccaggagg ccggagagct tcctgtgttc agcctcagtc cccgcaaacc 3060 ctgcagggtt tgagtggcgc aggggccagc ccctctagct ttgcaagagg tagtcgatct 3120 ccaaacctgc aaaaagtcga tctttttgca ggttgcagcc tgcaaaaaga ggaaaagqgq 3180 aggatgtgca ggctctggga accccagaga ccggcttgtg agattatttt tattaagatc 3240 cactiticaa aggeggteet geoegeette atettqqqqq atqtqqattt qqaaaageet 3300 agcggagaag gaaaacatta attgatttcc cggcttggga gccaccgccc tgggtaacaa 3360 tecagteaca eegaaagaac gtaaggtgte acteageege ateetggete eacttattat 3420 ttaccaageg tgtagtgtga tgtggctagt gtgaagggtg tacacgcaga gcgcacgcgc 3480 gegeaattge taggegagea eggagggege ateacacaca cacacacaca cacacacaca 3540 cacacacaca cacgacactt cagtcccaag caagatcccc tgtagaattc cctqccqccc 3600 cttgctcaac cccaccttc tgagtgcctt tgggccaacc cgaagccgcc tcttctaccc 3660 geoccetece cageactect etecgactee acceegeega aggeaggtge ceggeegget 3720 gctgttgcgg gttggcggcg ctccaccgct gctggtgccg acatcttctt cccgaacaga 3780 tgggatggga gtgggcgctc ctggaaaggg cgttttagcc ggacaaccac tgggcgggtc 3840 cccaaaaagt tggagatggt gtagagaccg ttcttaagga gagagaaatg gacagagaga 3900

gggagagtgc ccttttggtc cttttagccaa aattcctgct tcccaacaca cctcctacct 3960 contected ecceaecee gecaaaatet gagettgeag atatggattt geceeteec 4020 tcccgcagtt gcagcataca cacacacaca cacacacaca cacacacaca cacacacaca 4080 acatattata totatataat tatatattot atatatoota tatactatat tatatatatt 4140 tatatgtaac caaacatgta gaacccaaaa aaggtgcatt tctggaatca gaaatgggga 4200 gcagaagaga gtgaggtggc aggcagccaa agcctctggg agggaaagga gagggcggag 4260 gagagggtgt tttgctaggc tgttgctgag caactggaga gggagtgggc ccgagagcag 4320 ggtgctgaga gcgagcctgg ctctgcattt cattctggcc agttcaggag cagagataga 4380 tacggaaaaa agaatgtgtg tgaggctgga gggagatgaa agacgggagt tatttgatgg 4440 gcaaagctca gtaaatagcg gtgagtggag ggagtcaagg aagtactggg tttgctttcg 4500 ggcatttttg gtggggaatg aggtttgatg ggctggtccc cagcatagat accggggttc 4560 gggtaggtct cctctgtgct ggtgagacat tcagtttaag atgtagggag ccgtgggttc 4620 tggctttcgg ttctgtcatt aagaaatgag acaccgtggg acaaaaaata ggcttctgga 4680 aaagaaaqca aaagcattac ctaaataaaa gtgaattcag cctttgcttc tttgaggggt 4740 ttggcctcca tcaccctggc ttcaactcca agcctggtct aaaatgccat gttgaagtcg 4800 agttccagag ttaggtttat tggccaaatt tatgtctggg ttgagcaaga tcatggaaaa 4860 ctgaaggage caaatteett teecaceege acceettee tetgaaacaa gtetttgaga 4920 ggatggcgtg ccctgagcca accaaaacgg gagttgggaa aacgagatgg ggctttaact 4980 ggacttttct cgccacctcc gcccaccgc cccgccccg cccaccccgc ccccctcc 5040 ccacctttct gctgtgtcag ctcagactgg aagaacaagc agagttagcc ctagtgagag 5100 egacettete catecacece ecqacecece accecaacte taaggeatee cetgaggget 5220

tgagttttaa gtcagagcag ctgtgagtta gtcccggggc ttgggctgga tttgagcagg 5280 caggtgggcc tgcagctgca gagggtggac cagcctgacc ctaggagcca gaggtcatcg 5340 tgagggttac agcaaagggc atgggagcag gaattccctg cagaagccct ggccccctta 5400 atggagcgaa gaagccagcg ggaagggaag gtaatacttg tctaaagttt ctactttgta 5460 cctgagcaat gcctatgaaa cttttaagat atttagtgtg tggaaaataa aactctggag 5520 aagagatcac cacactccag acccactaca tecagaaact ggaagaagat cataaagagc 5580 aggtaccaac caggggccag agcagaaggg aagagggtgg gagaatggct gcgttgagtc 5640 aagcaggcga tttggagggg tttgtttagt tttacatttg ctttttctct acagttggtc 5700 caaaagetge aatteecaga gactateett aaattgeaat eaggacatgt tatteaaaac 5760 agtaagactg attacacatt gattacatac ttgcaaaaat aaataataaa ataaacaagg 5820 atggcagtgt aggettetac teccetecce caataccagt gaaateceee cetttattt 5880 ccagtttcat ttctttccat aaattctgtt atgatgtcat ttctctctct ctctctcttt ttaaaaaata taaatccaga ggagtgactg aaaatctctg tgaggaggag aggttatatt 6000 cccaccttgg ccactatgct gttggtttag agcacctaac caggttagtt agttagtgcc 6060 tggccactca gcttagctca gtcctagtgt ctctccagga attgtctggg tattggccaa 6120 ataatgttaa agctggaagg aacccatagc catcatcaca gtcaaggtcc tagttttaga 6180 atgaggatac tgaggccctg agtgggaagt cacttgccca agatgtggca gcagggttag 6240 agacagacaa ggggctggga ctcagctctt tcccgcaggg gctccagcac tgcattcagc 6300 cattcctggc tttctcgcta gtcactgggg ctcatgcctg gacctgggct aacctgcagt 6360 aaggeetttg geaaacactg eeagatgeta teactecatg acataagaac ccataatctg 6420 aaggcactct gttttagggg cagtaggaaa aggagtgaag cggccccaaa gtggagaggg 6480 ccacactete ttattttcac acteaettet gteeettttt etacacagte ttgcatacaa 6540

gcctggctta ggctagtggt ttggtcagag aaagaggacc aagagggtgt gaaggagggg 6600 tgttcacccc agctttcagg tccatgcgcc aaacctcatt ttctacatga caggaagctc 6660 teetgatgtg gagaggeagg eaggeetgge tgeetetgag etgtgeageg geetgtagte 6720 ttgaagaaca tggtgcagaa gtggcccgct tccaacagca cagtcctcac gtggtgccaa cagaaagcag agatcgagag agggtgtggt tggatggggt gagtgcagta actaggaagt 6840 tctgcatccg aaggagagaa ggaaaaccat ataccaccaa agctgataag gaagagagca 6900 tgagggcccc ctggctttct ttcataggca gatgtgtctc agatctttca gcaggagagg 6960 agagatgtgc ttccagaggg cagctgggga cttctggttg tgctgcagga agtgctgaga cccattctaa tacatcctgg aggccgtggc agctcctcct tctgggatgc ttaggaagga ggcagataag ataggcccct ttttccggta agtcagacct gccaggtgaa ctataggaac 7140 attitaaacg aactcagtta tetcatgttt gatccetcaa cetaaaccat caggeeeett 7200 tecetggeet aaaataaggt ceeactgaat etgeacteag agceaggeet cagatgacet 7260 ctgctgattc tctgagttgt ttaatgtggg ttccagttat cccgaactgg gactgcgaca 7320 eccetetyte aceteageea ggatgaetet tettecagat catttagaac ageaetteca 7380 attgaaacat aatacaagcc atatttgtca tttttaattt tetggtagce acatettttt 7440 taaaaaaggta aaaaaaacag ggaaattaat tgtaataata cattttaact gaatatatcc 7500 aaaatateet ticaccacae geteaaaata aaacaattat aatgagatat titacattet 7560 ttccttcata tttagccttt gaaatccggt gttttttaca cttacagctc atctcaattc 7620 agacactaaa ttttcattgg aaatacttga tctgtattta gatttcataa aatttacagt 7680 tgaaaaagca gagtcacata cctgaggcat tccaaacata ctttaaaaatc tttccaataa 7740 ttttaaaatg tggttcctca gttccccggg ccacatttca gatgttccgt atgtatctgc 7860

acatggttaa	tggctaccag	caaacccctc	teteacetga	a gaaggcaact	gctgtcccca	7920
ctctttcctt	ttgctcccaa	agactcaaaa	aaggggagto	tcagettte	g ttgacagaca	7980
gggctccctt	gtttggtccc	tagcagagec	tgggcacctt	cttcggggc	tcaggagaga	8040
agcgtaaacc	ctacttcctc	cetgeegeee	ccttctggtc	: atgcagaact	ttggggggat	8100
gtggctgtgg	ctggcaatgt	tctgaactgg	ctgtgatggg	tcatgatggg	aaagtggcca	8160
ggagaaaagc	tgcccagtgc	ttcctccaga	ggctgctccc	: cacctatece	cccaccatta	8220
ccttctcatt	tggggaatgt	atgaggaaca	gacagacact	tctactaagc	atgctcccc	8280
ttccccaact	ccaaaagaag	cttggctgga	gatteteage	cagggacttg	tgcatcagtg	8340
tgtatttcct	atgtgtacag	ttatcgccag	ctgcttccca	gggaccaaga	aatgtgaacc	8400
agagtcacaa	ccccaaatcc	tagtttggca	tcagaaaaca	acaaggagcc	tetetttace	8460
tetggteest	ggacagtggg	gcagatgtaa	gggggacete	agccccttac	tctgtgaggt	8520
gtcaccttcc	cacctgtggc	atctacactg	tggagggegg	tgggccccct	tttctctata	8580
tatcttcagg	gaaggaggct	aagtgccctt	aacgcagcat	gaaggaatgg	ggttaggcag	8640
aggaaggact	cccaggggga	gctctctaag	tggagacggg	teeggagage	acctgtgcca	8700
agtecteace	tggtgttggc	caacagaccc	ccagagacaa	aggtegagee	aacactttct	8760
ggcagacett	cctgcagtcc	aaggagcctc	agatcttgtg	gtctacaagt	aggcgtctgt	8820
caaccaggtg	tcacagcaac	caaatttta	gttgatgatt	cgaactaggg	aggtggtagg	8880
aaacagcact	acaaaggcag	agacetgtte	tgagagtgaa	ttagcatgca	tcaccctgat	8940
taatcctcag	aatataatgg	agaaggggcc	attgccatcc	tccccataac	acaggtgaga	9000
aaactgaatt	ggaaagagga	agaagaaagt	aaggtctttg	ggaggctgag	gtgggtggat	9060
cacgagetea	agagatcaag	accatcctgg	gcgtggtgct	gcatgccttt	agtcccagct	9120
actcaagagg	ctgaggcagg	agaatcattt	gaacctggga	ggagagggtt	gcagtgagcc	9180

aagatcatgo cactgoacto cagootggog acagagtgag actcogtoto aaaaaaaaa 9240 aaaaaaaaag aaaggtcaaa gtaaatctgt accaaggttt gtttatttat ttatttttag 9300 aaacaaggtc tcactctgtc acccaggctg gagtgcagtg gcacaatcat ggctcactgc 9360 agcotecaac tootgggtto aagcoatcot coottotcag actooccatt gotaggacta 9420 taggtgcaca ctgccacgcc cggctaatat ttcattttat gtagagatgg ggtcttgctg 9480 tgttgccaaa gctgcatcaa ggtttactga gctattgtca acagcttcat cttcctccca gaaaggacag ctgaaggttt agggtggcac agtttgctgt acctattcag tagtggagct gggatttgaa cccaggtggt ctggttcctg attctgaatg gttatccact atactacatg 9660 gtgtctgtat ttctctggta aggatagaga tatattccca gcttggccag ctttgctgtt 9720 ggtttagagt acctaaccat gctatttctc ccggcctaaa atggggtagg ggggctcagc 9780 tgggtacacc tatagecete atcatecagt cagtagttet etaagtetge teaacteece 9840 teeggggtet teeteetgge ttteeteeat tettacaget getttttagg atgacagett 9900 tgggtttttt ttttttctta aaaggttagt gctcatttcc tcctcagccc ataattcagg 9960 ttaaaaagaa cccggaacat gcatgcctat ttctgacgat caagtaaaaa caaaaacaaa 10020 caaacaaaaa acaaaaacaa aaaaaaatgt cttctgagag agactggcgc caggcagctg 10080 ctggtcagag atgggatggg taggaaaaga aatgatgttg ccacttccct ggaagtgtcc 10140 acagcacctt ccccctgcca caaccactgt ggcctttctc cttctgcaaa tgcacacaca 10200 caagcgcaga aaagccattt gacatccaca gctgggaaac agacttcaag agactgagac 10260 atgtcttaca ttttttcaaa cagtgaacag ccaatccctc atgcttccac cagccttgtg 10320 ttgtagggag gggctggtgg ctgcaagttg gctagggacc tagggttggc aagggaggag 10380 ggggactgca gaacattcta gactgggcct cagtattttc atccataccc aggcacaagt 10440 cagtgccgtc aggccagcac tgaccaggac tttctgcaat gatggaagcg ttgcaggtct 10500

gcaatgtcca tatgtggcca cgaagtcctt gaaatatggc tagagtgact gaggagctga 10560 atttttcatt ttatttaata tttatttaaa tagccacatt ggctagtggc taccatatta 10620 aatatatact ttttttttt tttttgtcac actattgccc aggggggaat gtagtggcac 10680 gatettgget cactgcaacc teegecteec aggttcaagt gatteteetg ceteagette 10740 ccgagcagct gggattacag gcacacacca ccatgcctgg ctgattttt atttftagta 10800 gagacagggt tttaccatgt tggccaggct ggtctcgaac tcctgacctt gtgatccaac 10860 ctccttggcc tcccaaagtg ctgggattac aggcgtgagc caccatgcct ggcctaagta 10920 gtacattaat atatagtagc cttaggccaa agagaagccc agtgaatcca ggagcacccc 10980 tgctgtttct cacacccatg acgctcatct gtctgcttcc ctgtgccctg cggcagggtt 11040 atcttgctcc agggcaggag catggatgag ataacctccc aaggcatgca ctgggctcta 11100 agccccagct tatattacag aaatacttcc agacctactt ctctttgcct cttgggcaga 11160 tttacacatc tetecattta aaggttattt attgaatact atatgetggt gagacaaaga 11220 gaaatgacaa agetetgeee gtaagaagtt ggetgtttaa atteeacagg ggggactaga 11280 atgaaaccca gaacaaattc agctcccttt ttcattcttt gtagagagat tctaggcgtc 11340 ctcatcttat cttctgtcta gaaaaggaga tgggagaatc tccccaggtc tgggtggcct 11400 ggcaaageee gacactette etggaetgtg aattteaagg atgeetetgt ttettegatt 11460 tttgtaagct aaggcacaat atctgggtca cctagttttc tcttacaatt gattattagg 11520 tcaagtgaga tagagtgata aactaacacc agcccaggaa caggctgtta atagcaccgg 11580 ggtgtggcta agaggtccgg gggcgggggg tttagatttt aggcaggcag gtctcctgga 11640 tccatccatt gctgtgacca gcaagcaagg tggagtcaga accettcaga ctctactgga 11700 agagaacagc cgtggcaaaa gggcaggttt ggagaaagtg gttgagcttg ggcagggtac 11760 atgcgttgtg caattgtgca gcatggagta tttctcaccc taagatgcct ctgggtctgt 11820

agcagctggg cttgcatcat gacactctct gtgtttgcca ggacatagag gatggtgcaa 11880 tcctcaaaca cgtgttcatg ttaccatggg gagaggctga tgtactgtgt gtgcctctgt 11940 ggatgctgct gcactggggt gtatggggaa ctccttatga atgaaagagg actgagttgg 12000 ccacccaaat gtggcagggg ccagaggcat tggagagcca gtgggaagga ctggaggtat 12060 tatatagaag ccagagattt agatcccacc ccaaaggtaa atactgtatc cagataatat 12120 tatcatcatc ccctccctta gtcattgaat agggttatga aggtaaggtc tggcctccat 12180 agateceage aggagaaatg gatgetgage attecacatt teccatecte tgeaaaaace 12240 tctcagaaca gcatctcatg ggcggggaag tctggaatat gtctctcttc cttcctggat 12300 cattttccag ttggaggtta cagaaacagc agaatgccat gcacaaacaa gccctgttcc 12360 cetetecete acetgeette acteteceae acatgggtte teteegggee tegettgttt 12420 gtctccctga ctctttaaat atatcctgca gacacacaaa cagaaggaag ggatttattt 12480 gaatgattat tgcagaagta ggagagggag gcacccaaat tccagattta ttttttcttt 12540 gagacagggt ctcactctgt cccccaggct agagtgcagt ggagctatca aagtggagca 12600 atcatggctc acctcagect cagectcaac etecaatete caacetecta cetecaacet 12660 occaccitee gggeteaage aatocteegg teleageete etgagtitet cagactagag 12720 gcgcacgcct ctatgcccag ctaatttttg tgtttttttt gtagagacgg ggtttcacta 12780 tgttgtccag gctggtctcg aactcctggg ctcaggcaat ccactcacct tggcctccca 12840 aagtgctggg attagagata tgagccaccg ctctcaattc caaattccag attttaaaaa 12900 cacttccagg ccgggcttgg tggctcacgc ctgtaatccc agctctttgg gaggccaagg 12960 cgggcggatc acgaggtcag gagatcgaga ccatcctggc taacacggtg aaaccccatc 13020 tctactaaaa atacaaaaaa ttagccgggc atggtggcgg gcgcctgtag tcccagctac 13080 tegggaggat gaggeaggag aatggegtaa acceaggagg eggagettae agtgageega 13140

gatcgcgcca ctgcactcca gcctgggcga cagaaggaga ctctgtctca aaaaaaaaa 13200 acaaaaaacg cttccagtcc ctagaagtgt gcccatgctg tgtgggtgtc agtctcccac 13260 geoetetget ggecacatgg agatattgae etgtttgtea aacaggttee agagcagact 13320 gttgagttct tttgctgttc acgtgcagaa caatcttcac caggaagtcc tcccgggtat 13380 cetgectaga tecettetge aaceteagtt cattttetet tgatgaaata getecagagt 13440 agecagteta ettgtteett ettgttttat etaaaaegea aageetteea caattgaaag 13500 cetatttatg actcagccac agagcagctg agtcgggctg gctgcttctg gcactcagct 13560 ccagtettae tttecagece tttaatetee atggetetge cctggetece etccaagttt 13620 cogetytete tetygageet acagytyaec acaagaceet gattagtate ttegacaety 13680 gactctgctg etgectaagg aataggtcce atggggttaa gtggcaccag aaaccaggag 13740 gcacatcaaa atgttaagcc tgctcttcag aagcagccaa aaagcttgca aagctgggga 13800 aggtgtgccc tcaggagact tgccttgggg aggctgggaa aaggagagag tttgcaaaag 13860 cattttgagt tccttaaatg aagagagata caagaatcta cattttgtat gccagtatca 13920 tggttgcttg gccccggggc agtacttgaa cactttcaaa gaaaagagta agagaggtca 13980 aaataaattt accccaaggt ttatcaaacc gttgtcaaca gccccatccc cctcccagaa 14040 agggtgaete aaggttaagg acageecaca geaettetta gaaaaagtee caaaaggtga 14100 aaggtettga gaagagetgt tgagggaagg etgtgggeea eeatgettet gtgteeecca 14160 aggccaaaga gagaataagc taaaatgaca gctggaaaag ggcaccctct gaccaaatgg 14220 acagageete eeccaacagg tagecagagg aggatggaat ggcaceecca tttcagatgt 14280 ccttaagaac tagagagata gatgcttatt tetgettgga cacaggggga tggactaaat 14340 ggcctacgga aaggattcca ggaactgcta caccagccac aggagagaag ccagcttccc 14400 aggetgtete ecettgaaga ggtgacaatg tgttggetet ceaggecagg etggggcage 14460

ccactgaagg agacgcatag acgcatgcgc tggtcagcag ccagcccact ccccacctg 14520 ccctcacttt atccagttac aatcttgatt gaggaagggg tccaggcttc tccaatctga 14580 acccecteca ggettteagt agecaccata tectgtetge cecteccet acagtagtea 14640 actacttttt gaggattaaa atgegtggtg atgetgaggt tgagtggeac ggeteeagte 14700 cctccataag acgtgcccaa aagcccttct gtgcaatggt tagcactccc tctccctact 14760 ccctcttctc caagatctga gccttggcgt gaggcctgtg ttactagata acggagcccc 14820 agcettteaa tttgtacaaa gteeccaaac cagecatget tetecettee teetgecaat 14880 ctcacttgcg ctacaaccaa gaaaagtcaa tttaccccag aacatgaccc ttttaactaa 14940 tecetagaat cetgeattee acetaceaga gatgteacee tattgatgag tegteacage 15000 agggtctgat agagcagaat cgaggtactg ggacatcaag acatgactgg gaagaggggg 15060 tgagagtcca gaaggggtac caggattctc aggttgaatt ttatttaggg agagcccacc 15120 caccaccttg ctatttgctt tccccaagtc atcatcttcc tctccagtaa ttacgtccct 15180 teettteetg tgaataaata eecaaageaa etcaecaeea ggaaegetge gaaeetttgq 15240 aggettettt agggeaggga cettetetge caaggeetta aagaccagat acetatttea 15300 ttagacttga caaatcctga gccaagagag aaacagatgc ttgggtgctt cctgccacct 15360 gccatcctgc ccaggttagg ccaggtgtcc aaatgccttt cctaactcac acctqqaact 15420 tgcccagggc tgcaagctca gaagtcaggt tctatacctg cccagaggca taaaacagcg 15480 tottotcaaa aaagettoto titoottgoa coccaccoco acticotqqa attotaccca 15540 cttettetgt tecceatece agatgtetgg eggteactgt teetggacat eccagtgate 15600 atggagtaga tggagaacag aattttcttt cacctcattt cagttattta aggtcactca 15660 aagetetatt ttetetttee agtatttgaa aaaagaggga ggeaatgaag acagggeece 15720 ccacctccac tcacccctgc atctggtccc actgtgaggc atcctggcca cacgctgccc 15780

qcctqqaaac aacaatctaa agttccccca ttctggttcc tctgaggctg ggggaggtca 15840 aggatctgag aggagaaggg gacccaggga tggatgccta tgagatcaga atttagggga 15900 aaactgcgca ccaagaaaag gccggacggg tggaattaag gatcaacaaa tacatcaaca 15960 aagtetgact tetetaaagg teaaaageea getaagtata gaetgteage aageeactee 16020 tatatataac tgtcccggtc tcagccagct gtcggcctct ctcagtccag agctgagtaa 16080 cgtcccagcc tcccaggccc ccgagcaccg cgccagttct gagccagagc aggagcaagg 16140 cetecgaett ccacttggec ccacgecggt ceeeteeggg cetacattte tggeteteec 16200 ctccctcct cctgccgctt atgaaggtcc tcaccacct gctgctccag accccaggac 16260 cccctcctcc taggttcccc aggtccaaag agacctcaac atccagcagc tctgaaagtg 16320 caaagatete actaacagga cageetttge cettetegte caegeeetga etgtgtcate 16380 tgcctccatg ggcccagatt cccgggttcc tacttctcag ccccacctcc agccatgtcc 16440 catctacttg gccatccccc agcaagcaaa ccgctcgctg ccaccttcat ccttgcagag 16500 gccattttcc ttgcccttcc tccttactgc ccccagaagg cctgctccgt cctcacccat 16560 cagtetqtea gtetetegat teteeteete tgtgaageet ceetgeetge actetetget 16620 tgactccaag catgccagaa acttcctgcc acttaaatga gcattccctc tgcttcctgg 16680 ttcttatccc cctgctttca gggtgtgctc caggagggca gagacacatc tgcttcagcc 16740 tttattactc ccctcaccc aaactgccca gccctgggct ctggccgtgt gcaccttggc 16800 ccacgggggc tgaccctccg gctccttctc ctgcagagag agactcccgt gagcacgagg 16860 ageceaceae etetgagatg geogaggaga ectaeteece caagatette eggeecaaae 16920 acaccegcat cteegagetg aaggetgaag cagtgaagaa ggaccgcaga aagaagetga 16980 cccagtccaa gtttgtcggg ggagccgaga acactgccca ccccggatc atctctgcac 17040 ctqaqatgaq acaqqaqtct qaqcaqqtgc atctcgggga ttccctcatt ccctccagc 17100 ccagcagagg acctacagcc caccatgtgg ctcagcttag gacgtgggag tagagtttcc 17220 agagcataca cttgtcaggg ccaagggctt gtgcaagtaa gtgggaatag aggcggtgct 17280 catttqaqqa qagtgtgtgc cagcccagcg gccacgtacc aggtacctgg gccctgcagc 17340 tgtgtccagt ccaaggcaga gactgaatat tctcctagag catctagaaa tgggcacctc 17400 tggacattgt tactcagcag aagagaaaag ctgcagggga gggggtggac tggaacacaa 17460 aagagaaagt atgactccgt acctggccaa aggcaggctt tgtatgatcc cagcgcacgt 17520 gacaggtgac agggaggaaa gatctttggt agcagatgat tagaaccaaa ggtggtgact 17580 tteeteeaga gaeeetteag eeceeaeece etgggeeatt egteagegea getgggtggt 17640 tttcccttgg tctcgccacg cctctcaccc tcctgtccac acagggcccc tgccgcagac 17700 acatggagge ttccctgcag gagetcaaag ccagcccacg catggtgccc cgtgctgtgt 17760 acetgeccaa ttgtgacege aaaggattet acaagagaaa geaggtaegt eeeetgeeet 17820 gageteeagg eteagactge tecaaaaatg geacetgeea ggaaacteea eettgggeaa 17880 gtgcctaagg tttccaccgt taaccactta gtgtttcctg ggcctcagat acccattcat 17940 ataccacgat catgactttc cacattccct actatgctgt aatccatttc ctcattctct 18000 cctatgcggt aatccactat gctttccaca ggtcgcctta gctacatgaa ttccttgcaa 18060 aaggtaactc tgtaacacta tcgcacagca cgtatcattg gtgcaccqca cactcaggaa 18120 tttaaaccat attttctctg tgaaccacct gaaatcagtt catgtccctt cacagccagg 18180 ctctcctttg ggcaatggtt cttagatttc caagggcatc ctatccctgg agggcatggc 18240 tgatggctgg gcccacccc tgcagtttct gattggtaga cctggggtgg actccggggt 18300 ggacacgtga ccctgatgct gctttaaggg caccaataat ctaaatgtaa gagccaggcc 18360 acactggggc aaatettggc tetgecaett actagetgtg teetgttaet caccatttaa 18420 tgtctctgtg cctccagacc cttgtgtaaa atggtgaatg aggagtgagt gattggtctt 18480 tgtaaagcac ttagaacagt acctactgcc taccaaacgt tgagtggtgt ctactacatg 18540 ataacaccac aaatcatgcc tccttctgtt attattatta ccatcatcat tattattgga 18600 tcataactct cttgagaatc cctgcagagt ttcacgttgg gggaactcaa atgggtaata 18660 tttaaaacgg gactataagc caggcacagt ggctcacgcc tgtaatccca gctactccag 18720 aggctgaggc aggaagatca cttgggctca ggagttttag accaacctgg gcaacataac 18780 gggaccccat gtctgaaaaa aaaaaaagga aagaaaggga ttgaaggagc ttgccaaggg 18840 taggctgcct aaattcacat tttccctggg tctttccgtg aaatggggac accagaaacc 18900 caagggtegg gtctagtgcc ctcaactctc tggggatgag agtcttgcct tggggtagac 18960 aagaggcagg gcagggagga gcagagccct ggggtgcggc cgtcctcacc gcctgttgct 19020 ctactcaccc cagtgcaaac cttcccgtgg ccgcaaacgt ggcatctgct ggtgcgtgga 19080 caagtacggg atgaagctgc caggcatgga gtacgttgac ggggactttc agtgccacac 19140 cttcgacagc agcaacgttg agtgatgcgt cccccccaa cctttccctc acccctccc 19200 acceccagee cegactecag ceagegeete ectecaceee aggacgeeae teattteate 19260 tcatttaaqq qaaaaatata tatctatcta tttgaggaaa ctgaggacct cggaatctct 19320 agcaagggct caacttcgaa aatggcaaca acagagatgc aaaaagctaa aaagacaccc 19380 cccccttta aatggttttc tttttgaggc aagttggatg aacagagaag ggaagagagg 19440 aagaacgaga ggaaggaag ggaaggaagt gtttgtgtag aagaggaga aagacgaata 19500 gagttaggaa aaggaagaca agcaggtggg caggaaggac atgcaccgag accaggcagg 19560 ggcccaactt tcacgtccag ccctggcctg gggtcgggag aggtgggcgc tagaagatgc 19620 agcccaggat gtggcaatca atgacactat tggggtttcc caggatggat tggtcagggg 19680 gagaaaggaa aaggcaaaac actccaggac ctctcccgga tctgtctcct cctctagcca 19740

gcagtatgga cagctggacc cctgaacttc ctctcctctt acctgggcag agtgttgtct 19800 ctccccaaat ttataaaaac taaaatgcat tccattcctc tgaaagcaaa acaaattcat 19860 aattgagtga tattaaatag agaggttttc ggaagcagat ctgtgaatat gaaatacatg 19920 tgcatatttc attccccagg cagacatttt ttagaaatca atacatgccc caatattgga 19980 aagacttott etteeacgot gactacagta catgetgaag egtgeegttt cageceteat 20040 ttaattcaat ttgtaagtag cgcagcagcc tctgtggggg aggataggct gaaaaaaaaa 20100 agtgggctcg tatttatcta caggactcca tatagtcata tataggcata taaatctatt 20160 ctttttcttt qtttttttct ttcttccttt ctttcaaagg tttgcattaa cttttcaaag 20220 tagtteetat aggggeattg aggagettee teattetggg aaaactgaga aaacccatat 20280 tetectaata caaccegtaa tagcattttt geetgeeteg aggeagagtt teeegtgage 20340 aataaactca gcttttttgt ggggcacagt actggatttg acagtgattc cccacgtgtg 20400 tteatetgea eccaeegage eaggeagagg ecageeetee gtggtgeaca eageaegege 20460 ctcagtccat cccattttag tctttaaacc ctcaggaagt cacagtctcc ggacaccaca 20520 ccacatgage ccaacaggte cacgatggat ccaccagtee cacccagee ttttccttte 20580 atctgaacag aatgtgcatt tttggaagcc tccctcactc tccatgctgg cagagcagga 20640 qqqaqactqa aqtaaqaqat qqcaqaqqqa gatggtggca aaaaggttta gatgcaggag 20700 aacagtaaga tggatggttc cggccagagt cgatgtgggg aggaacagag ggctgaaggg 20760 agagggggct gactgttcca ttctagcttt ggcacaaagc agcagaaagg gggaaaagcc 20820 aatagaaatt toottagott ooccaccata totattttot aggatttgag aggaaagaga 20880 ggaaaatggg ggaatgggtt gcaaaataga aatgagctta atccaggccg cagagccagg 20940 gaaggtgagt aactttagga gggtgctaga ctttagaagc cagataggaa gaatcagtct 21000 RTS-0253 <210> 12 <211> 374 <212> DNA <213> Homo sapiens <220> <400> 12 aattcataat tgagtgatat taaatagaga ggttttcgga agcagatctg tgaatatgaa 120

gttgtctctc cccaaattta taaaaactaa aatgcattcc attcctctga aagcaaaaca 60

atacatgtgc atatttcatt ccccaggcag acatttttta gaaatcaata catgccccaa 180

tattggaaag acttgttctt ccacggtgac tacagtacat gctgaagcgt gccgtttcag 240

ccctcattta attcaatttg taagtagcgc agcagcctct gtgggggagg ataggctgaa 300

aaaaaaaagt gggctcgtat ttatctacag gactccatat agtcatatat aggcatataa 360

374

20

atctaaaaaa aaaa

<210> 13 <211> 20 <212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 13

gagcaacacc atcttctctt

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

The state of the s

20

<210> 18	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Antisense Oligonucleotide	
<400> 18	
ctcttttcgt tgaggcaaac	20
<210> 19	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
~220/	
<223> Antisense Oligonucleotide	
<400> 19	
gtagctcttt tcgttgaggc	20
<210> 20	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Antisense Oligonucleotide	
<400> 20	
tttctgcggt ccttcttcac	20
	-
<210> 21	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

the latter of th

<220>
<223> Antisense Oligonucleotide
<400> 21
agcttctttc tgcggtcctt
<210> 22

20

20

20

<210> 22 <211> 20 <212> DNA <213> Artificial Sequence <220>

<223> Antisense Oligonucleotide

<400> 22 actgggtcag cttctttctg

<210> 23 <211> 20

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 23

<212> DNA

aacttggact gggtcagctt

<210> 24 <211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<210> 28

to it is now and it is now have the read have been been und

<210> 31 <211> 20 <212> DNA

<220>

<213> Artificial Sequence

<2	23> Antisense Oligonucleotide	
<4	00> 31	
qt	cctcagtt tcctcaaata	20
-		
<2	10> 32	
<2	11> 20	
<2	12> DNA	
<2	13> Artificial Sequence	
< 2	20>	
<2	23> Antisense Oligonucleotide	
<4	00> 32	
cc	gaggteet cagttteete	20
<2	10> 33	
<2	11> 20	
<2	12> DNA	
<2	13> Artificial Sequence	
<2	20>	
<2	23> Antisense Oligonucleotide	
	00> 33	
ag	attccgag gtcctcagtt	20
	10> 34	
	11> 20	
	12> DNA	
<2	13> Artificial Sequence	
<2	20>	
<2	23> Antisense Oligonucleotide	
<4	00> 34	
gc	tagagatt ccgaggtcct	20

<212> DNA

<210> 35	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Antisense Oligonucleotide	
<400> 35	
cccttgctag agattccgag	20
<210> 36	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Antisense Oligonucleotide	
<400> 36	
cctaactcta ttcgtctttc	20
040 25	
<210> 37	
<211> 20 <212> DNA	
<213> Artificial Sequence	
<220>	
~2207	
<223> Antisense Oligonucleotide	
-BB- INTOLOGICO VELEGOIMOROVEMO	
<400> 37	
ggagaggtcc tggagtgttt	20
55 5 65 55 5-5	
<210> 38	
<211> 20	

20

20

<213> Artificial Sequence <220> <223> Antisense Oligonucleotide <400> 38 gatetgette cgaaaacete <210> 39 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Antisense Oligonucleotide <400> 39 ctttgcagct ctttcctagc <210> 40 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Antisense Oligonucleotide <400> 40

cttgcaaaaa tgtagagaga 20

<210> 41 <211> 20 <212> DNA <213> Artificial Sequence <220>

<223> Antisense Oligonucleotide

<400> 43

actgtagtca ccgtggaaga

RTS-0253 -34-PATENT <400> 41 getttggetg cetgecacet 20 <210> 42 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Antisense Oligonucleotide <400> 42 ctgcaggaga aggageegga 20 <210> 43 <211> 20 <212> DNA <213> Artificial Sequence <220> <223> Antisense Oligonucleotide

20